

Title (en)
OPTICAL SYSTEMS HAVING RETRO-REFLECTORS

Title (de)
Optische systeme mit Retroreflektoren

Title (fr)
SYSTEMES OPTIQUES A RETROREFLECTEURS

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Application
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Priority
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Abstract (en)
[origin: WO0171249A1] A method and system for condensing and collecting electromagnetic radiation onto a target surface (43) comprised generally of a radiation source (41), a primary reflector (42) and a retro-reflector (46) having a shape complementary to the shape of the primary reflector (42) is disclosed. The primary reflector (42) has a reflecting surface for reflecting the radiation from the source (41) which is substantially concave in shape. The radiation source (41) emits substantially uniform radiation flux in substantially all directions which is collected by the primary reflector and redirected toward the target surface. The retro-reflector (46), having a complementary shape which depends upon the shape of the primary reflector (42), is positioned so as to intercept a portion of the radiation redirected toward the target surface. The retro-reflector (46) reflects the intercepted portion of the radiation back toward said primary reflector (42) along the same path such that the redirected radiation is channeled back through the source (41). In such a manner, flux density at the target surface (43) is improved.

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G02B 6/0006 (2013.01 - EP US)

Citation (examination)
• WO 0102773 A1 20010111 - COGENT LIGHT TECH [US]
• US 4755918 A 19880705 - PRISTASH DAVID J [US], et al
• GB 763376 A 19561212 - REINHARD PAUL HENRY HINDS
• US 4897771 A 19900130 - PARKER JEFFREY R [US]

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